THE QUAVER.

WITH WHICH IS PUBLISHED "CHORAL HARMONY,"

A monthly Advocate of Popular Musical Education,

And Exponent of the Letter-note Method.

All Correspondence and Advertisements to be forwarded to 20, Paternoster Row, London, E.C.

No. 49.] JANUARY 1, 1880. [One Penny.

Advertisements.

The charge for Advertisements is 1s. 6d. for the first twenty words, and 6d. for each succeeding ten.

TO CORRESPONDENTS.

Write legibly—Write concisely—Write impartially.

Reports of Concerts, Notices of Classes, etc., should reach us by the 15th of each month.

The name and address of the Sender must accompany all Correspondence.

A KNOWLEDGE OF HARMONY is invaluable alike to the vocalist, the pianist, the organist and the harmoniumist, giving them a reading power which otherwise they could only attain after many years' study; and also enabling them better to understand and appreciate, and, therefore, excel in and enjoy, the music which they perform. A class for study is now forming, particulars of which refer to the advertisement.

THE QUAVER is published on the 1st of every month. Price One Penny, including from four to eight pages of music printed either in Letter-note or ordinary notation. Post free for twelve months,—one copy 1s. 6d., two copies 2s. 6d.

SPECIAL NOTICE. On and after January 1st, 1880, only the music pages of THE QUVAER will be stereotyped, and, as the letter-press portion will not be reprinted, copies of the latter cannot be obtained after the month's edition is sold out.

FIRST STEPS IN MUSICAL COMPOSITION.

Revised Edition, reprinted from "The Quaver."

Now ready :—

Sheet 1, containing paragraphs 1 to 98; sheet 2, 99 to 184; sheet 3, 184 to 201; sheet 4, 201 to 243. Copies can be obtained, post free fourpence per sheet, from The Secretary of the Quaver Composition Classes, 47, Lismore Road, London, N.W.

FOR CHRISTMAS AND NEW YEAR. "Choral Harmony," Nos. 7, 11, 78, 97, 126 135, 148, 157, and 162, one penny each. *Christmas Crotchets*, a reading with musical illustrations, No. 24 of THE QUAVER, price one penny.

THE "QUAVER" COMPOSITION CLASSES.

A NEW POSTAL CLASS, for beginners, commences Jan. 1st. The instructions necessary are contained in "First Steps in Musical Composition," which can be obtained of the Secretary; and the only preliminary knowledge requisite is that possessed by the average singer or player who is able to read music. The themes and problems, to be worked out by Students, forwarded on receipt of entrance fee.

Entrance Fee, 1s. Correction of Exercises, per set, 1s.

Each set of exercises to be forwarded to the Secretary for correction, monthly or otherwise, enclosing the fee for correction, and a stamped addressed envelope or post wrapper for reply. Each exercise should be marked with the number of the theme or problem to which it corresponds, and have abundant margin left for corrections and remarks. The exercises may be written either in Letter-note or in the ordinary notation.

Students forming themselves into clubs or choirs, as suggested in the introductory paragraph of "First Steps," may, if they choose, send in periodically only a single set of exercises worked out jointly.

Members requiring further information upon points respecting which they are in doubt, are requested to write each query legibly, leaving space for reply, and enclosing a stamped addressed envelope.

Exercises for correction, and all communications respecting the class, to be addressed :—

The Secretary of The Quaver Composition Classes, 47, Lismore Road London, N.W.

BRITISH MUSEUM

The Management of Voluntary Choirs.

By C. J. Frost.

[The following paper was recently read at the College of Organists, London. Whether our readers are Churchmen or Nonconformists, whether they approve or disapprove of the organ, the surpliced choir, the orchestra, etc., they can derive some practical information from the remarks of the lecturer.]

HEN the suggestion that I should read a paper at the College of Organists' monthly meetings was first made, I found great difficulty in selecting some subject which had not previously been enlarged upon, the ground in all directions having been so well trodden. But the subject of the Managemement of Voluntary Choirs seemed to me one upon which a good deal might be elicited (in the way of discussion) from the experience of the company present; and if my own experience may not lead me to say anything by which you may go away from this meeting wiser, on the other hand, I may be considerably the gainer myself from the discussion that I hope my few straggling remarks may be instrumental in generating; and if so I may perhaps be pardoned for introducing to your notice little that is novel or startling.

Speaking generally, the Voluntary Choir of the present day, though still capable of much improvement, is in a very different state to that of twenty or thirty years ago. The advance in the right direction made during that period has been such that, in looking back to the olden times, we wonder how ever the musical taste of that period bore with the so-called music to which it was treated.

We are fully aware of the existence of people who regret the changes that these twenty or thirty years have brought about; and who fail to appreciate the legitimate use of the modern organ, the great and indispensable services of which, as an accompaniment to the music of divine worship, has, even in our most remote village churches, entirely supplanted those two or three instruments that it was the delight of the parish clerk, the old sexton, and the village blacksmith to blow so indifferently, and to scrape so wretchedly.

The contrast to this that the orderly and well organized surpliced choir of the present day presents to the worshipper within the same walls must be great, and the conduct of the service more consistent, seemly and decourous. The present generation of choir boys are not little angels, and, indeed, if every one is to be believed, some of them are the most notorious little rascals under the sun. Still, with great vigilance, firmness, and care they can, and generally are, induced to behave decently and reverently in the house of God, and to this end the present conspicuous position of the choir in the chancel in a great measure contributes.

It must be granted that a great deal is to be desired in this respect even now, but I must say that present circumstances put to shame the unseemly conduct and transactions that were formerly in a greater or less degree the certain attendant of those mixed gallery choirs now happily nearly obsolete. A great advance in the estimate of the importance of choir work, on the part of persons in the higher walks of life, is also manifest in the present day: and the value of such a feeling cannot be appreciated too highly.

For, to return to the period I was speaking of—viz., some thirty years ago, most persons who had the good fortune to be in anything like a respectable position would then have considered it far beneath them to have belonged to the choir of the church in which they worshipped, and indeed generally looked with something closely akin to contempt upon those who thus assisted in the service of the sanctuary. This was a certain consequence of the condition of circumstances in connection with musical matters then existing. We can look with evident satisfaction to the opposite picture which the voluntary choir of our day presents, where the well-to-do gentleman may be frequently found singing tenor side by side with his gardener; and the squire of the parish or lord of the manor supporting the bass part with his coachman's assistant.

The exodus of the violin, 'cello and flute from the service of the accompaniment of sacred song in the sanctuary, under the conditions to which I have drawn your attention, leads me to embrace the opportunity of acknowledging the importance to the church music of the future, of the modern development of the use of the orchestra as an accompaniment to the music of divine service. It has been most suitably and effectively introduced on festivals in some important cathedrals and churches where there exists a well trained choir, which is efficiently augmented on such occasions. The importance of this step, which is producing results in every direction, it would

be impossible to over-estimate. This is a legitimate and proper use of orchestral instruments in divine worship, and owes its contrast to the other picture I have drawn, chiefly from the fact that the instrumentalists officiating at such services are not only excellent, but frequently the best performers on their several instruments; instead of being such indifferent village amateurs as our forefathers ought to have been frightened to listen to.

To organize a decent voluntary choir to sing to such rude attempts at accompaniments as I have mentioned would have been a sheer impossibility; and it was not till the introduction of the key-board in its stead, that anything like an important step was made towards the general use of voluntary choirs worthy the name. The chief reason of this is, that there is not one tenth the difficulty experienced in getting hold of one person, who, with a reasonable amount of diligence at manual practice, may be induced to play at some key-board passably well; that there is in finding several persons who could manipulate on a group of orchestral instruments with equally satisfactory results. The necessity of a fairly fluent accompanist to the early rehearsals of such voluntary choirs as would be organized in the majority of churches in our country, is at once apparent; for the raw material which, as a rule, the choirmaster finds he has to commence with, cannot be brought, for a very long time, into anything like usable form without its occasional aid; and, though the theory of practising all things that have no *obligato* accompaniment, without any accompaniment whatever, is admirable in its way, it is impossible to follow it always in the case of voluntary choirs.

For instance, imagine that at a rehearsal one of the four parts is completely unrepresented, or, perhaps, is represented by one or two who cannot sing a note till someone they are accustomed to follow puts in an appearance; how would it be possible or endurable to practise the other two or three parts without the aid of an accompaniment? Further, when once a voluntary choir has been established, it has to support the music for each Sunday at least, and this is a kind of constant tax upon their practice time: so that the necessity of getting so much work ready is frequently the cause of less efficiency in its performance than would otherwise be the result.

With these and other drawbacks borne in mind, such, for instance, as the tendency on the part of all but the most perfectly trained choir to drop in pitch; the necessity for an accompaniment cannot but be acknowledged. In voluntary choirs where a difficulty is found in completely and adequately representing all the four parts, which the proper rendering of every simple chant or hymn-tune entails (and the existence of such choirs is, I fear, anything but imaginary), it would be folly in the extreme to give the treble and bass parts, or the treble and tenor, in the absence of the other two. Infinitely better would it be to arrange that all sing the melody in unison, or, more properly speaking, in octaves, and let the accompaniment alone supply the harmony. I grant that there is a strong objection to this in the fact that the progression of parts in all psalmody will not admit of such treatment, as for example in passages which have not the treble part written in double counterpoint with the tenor and alto, and which, by such a change *of*, or rather *to*, the melody, would induce such bad progressions as consecutive fourths becoming consecutive fifths, and the like. But in reply to this objection I would say that it could be avoided by selecting music that *will* bear this inversion. All hymn tunes and chants written for use in Divine Service should be constructed in this way, for cognizance should be taken of the fact that in every congregation the treble part is always sung in octaves, and, as every musical ear knows to its sorrow, sometimes in double octaves too; the *re*-duplication of the melody in the lowest octave being occasionally growled out, even below the bass part. To make this *ad libitum* manner of rendering the Canto Fermo unobjectionable with regard to the progression of parts, the composition of a hymn tune would be made a somewhat complicated task, which would effectually keep many young aspirants for fame in that department out of the field altogether.

[*To be continued.*

An epidemic has affected some of the musical associations of the metropolis. Mr. Henry Leslie's choir has disbanded itself, its respected and talented conductor having resigned his post. There is also a possibility that the oldest Choral Society of eminence —The Sacred Harmonic—may succumb, the directors of Exeter Hall having refused to apply for a music license: but surely, if Exeter Hall is unavailable for the purpose of classic sacred music, there are plenty of concert rooms elsewhere, and with Albert Hall in the West, the Agricultural Hall in the North, and the Crystal Palace in the South, all waiting to be filled, The Sacred Harmonic Society need not perish through want of a suitable residence.

324. No. 343 is described as a "canon, three in one," *i.e.* three voice-parts having one subject: it will be observed that the second voice-part is the same as the first, the imitation occurring "at the under-fourth." No. 344, in like manner, has but one subject, the imitation in two of the voice-parts being "at the over-fifth." No. 345 has two distinct subjects, and is, therefore, described as a "canon, four in two."

325. Besides these kinds, there are or were *canons by augmentation, by diminution, by contrary motion*, the characteristics of which species of imitation are explained in paragraph 321. Another kind was the *circular canon*, which ended on a note a minor second higher than it commenced, and, this new pitch being taken for every repetition of the canon, a given number of repetitions would raise the pitch to a given extent—a style of composition which singers addicted to dropping their pitch must have found invaluable, as it effectually provided for this untoward contingency. Another of these obsolete kinds was *canon cancrizans*, or *crab canon*, so called because the second strain was a repetition *backwards* of the first, the voices exchanging parts as well as retrograding them: the term *per recte et retro* (forwards and backwards) was a direction or a description of a similar process. Certain ancient and modern terms also require explanation in order to render our remarks more complete;—a *closed canon* was one in which no indication was given as to the kind of imitation employed, or the point at which the consequent part "took up," such canons being of the nature of a puzzle only a single voice-part was printed and the number of parts stated;—an *open canon* was written or printed in the ordinary way, with all this information supplied;—a *close canon (canone al sospiro)* is one in which the consequent follows the antecedent with the least possible delay;—the nature of the *strict, tonal*, and *free* varieties of canon is explained in paragraph 320.

FORM.

326. The subject of Form includes those of Rhythm, Number, and Tune—points fully treated in Chap. VIII. (Melody), all the statements in which refer to the structure of the music as a whole, whether consisting of one voice-part or of several. Form also takes cognisance of the peculiar shape and style of each species of composition. For example, the hymn tune, the song tune, the dance tune, the march, the sonata, etc., are each cast in a particular mould, and each has a form of its own (the analogy of which in the art of poetry is to be found in the sonnet—a form which contains fourteen lines, neither more nor less); for example also, the anthem, chorus, glee, madrigal, etc., which, although they are not moulded in any set and unvarying shape, have yet certain characteristics which distinguish the one kind of composition from the other. To attempt to deal with all this matter here is quite impossible; but as the young composer's "first steps" will naturally consist in simple forms such as hymn and song tunes, a word or two of practical information upon this point is advisable; for the other kinds of composition, we shall add a concise glossary of the various forms employed, sufficient to indicate their prominent characteristics, for fuller information referring the student to works which treat upon *Form*.

327. Hymn tunes and song tunes must necessarily assume forms corresponding to the words with which they are allied: the young composer should, therefore, know something about *metre—i.e.*, the different modes of accentuation and the various quantities of feet employed by the poet, for to these the rhythm and number of the music must adapt their form.

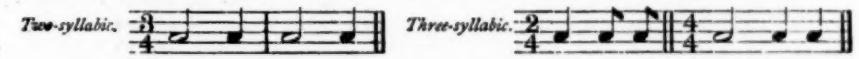
METRE.

As our remarks are intended for the student of *music*, every fact is looked at from a musical point of view rather than the poetical.

328. In metre, as in music, there are *feet;* and each foot comprises either two or three syllables according to the nature of the metre (corresponding to the two-beat feet and three-beat feet employed in music—Chap. VIII): if poetical feet exist containing a larger number of syllables, they may practically be reduced to the smaller denomination, a four-syllabic foot into two two-syllabic, and a six-syllabic into two three-syllabic feet. Metres are, therefore, first divisible into these two great classes, (1) where the accents occur once in every two beats—the two-syllabic metres—which class may be compared to

a square, and (2) those where the accents fall once in every three syllables—which kind may be said to resemble a triangle. Two-syllabic metre is, therefore, suitable for two-beat or four-beat measure in music; and three-syllabic metre, for three-pulse or six-pulse times:—

But, by employing notes of different values, we can reverse these conditions, thus:—



329. These two great classes of metre are subdivided in accordance with the position which the accent holds in each foot: the two-syllabic metres have, therefore, two kinds of foot,—(1) the *trochee (tro-kee)*, in which the accent falls upon the first syllable in each foot, as | *Busy*, | *bustling*, | *crowded* | *city*, in which each word forms a foot, and the first syllable of each is accented: (2) the *iambus*, where the accent falls on the second syllable, as *A-* | *wake! a-* | *wake! a-* | *rouse! a-* | *rise!* in which each word forms a foot, and the second syllable in each is accented. The three-syllabic metres have three kinds of foot,—(3) the *dactyl* in which the first syllable is accented, as | *Bountiful* | *Providence* | *lib'rally* | *rendereth;* (4) the *amphibrac*, where the accent occurs on the second syllable, as *Dis-* | *coursing mi-* | *nutely con-* | *cerning re-* | *ligion;* and (5) the *anapaest*, having its third syllable accented, as *Unad-* | *mir'd, disap-* | *prov'd, disal-* | *low'd.* In all these examples each word forms a foot, the vertical lines indicating the barring of the music.

Besides these five kinds of foot there are others, as, for example, two more in the two-syllabic class—the *spondee* (two accented syllables in succession), and the *pyrrhic* (two *un*accented syllables in succession), with further varieties of the three-syllabic class: these, however, are of an exceptional nature, and when found intermixed with either of the five above-mentioned must be provided for as exceptional.

330. These five kinds of metre are further varied by using different lengths of line, or, what is the same thing, different numbers of feet in each line. They are varied still further by intermixing in the same verse different lengths of line, or even combining in the same line different modes of accentuation. The variety is, therefore, unlimited—almost as much so as the rhythm of music itself—and examples of a few different kinds of metre must suffice by way of illustration. The three most usual metres ("Common," "Short," and "Long") are designated by their initials, "C.M.," "S.M.," and "L.M.": the others are sometimes lumped under the head of "P.M." (Peculiar Metre), but are preferably distinguished by numerals indicating the number of syllables contained in each line, and still better when the nature of the accentuation also is indicated—for which latter requirement a simple plan is suggested in paragraph 332.

Class 1. TROCHAIC METRES.

a **2s.**

Going,
Coming,

b **3s.**

Courage high,
Spirits light.

c **4s.**

Hark the pealing,
Softly stealing.

d **5s.**

Like a passing dream,
Like a flowing stream.

e **6s.**

Hither, friends and neighbours,
Leave awhile your labours.

f **7s.**

Tell me where is beauty found,
Does it dwell on earthly ground?

g **8s.**

May, thou month of rosy beauty,
Month when pleasure is a duty,

h **9s.**

Jolly Autumn comes with laurel crown'd,
Peace and plenty spreading all around.

i **10s.**

Softly rippling, gently flowing river,
Sadly murm'ring, on thou goest ever.

j **11s.**

Through the sable curtain of the ev'ning sky,
Shining orbs of light are twinkling far on high.

INTERMIXED TROCHAIC METRES.

k **6s. 5s**

Hail to thee, blithe spirit,
Bird thou never wert.

l **6s. 6s. 5s.**

Crimson leaves are flying,
Summer's glories dying,
Winter time is nigh.

m **7s. 5s.**

Pluck the rose while yet it blooms,
Now 'tis fresh and bright.

n **7s. 7s. 5s.**

Bold and valiant, staunch and strong,
Upright, downright, scorning wrong,
That's the man for me.

o **7s. 7s. 7s. 5s.**

Love me little, love me long,
Is the burden of my song;
Love that is too hot and strong
Burneth soon to waste.

p **7s. 6s.**

When the earth is hush'd to peace,
Night its bustle quelling.

q **7s. 7s. 6s.**

Wintry winds no more annoy,
Spring's return awakes my joy,
Life new strength regaining.

r **7s. 7s. 7s. 6s.**

Ye who shun the haunts of care,
To our forest wilds repair,
Where through clear cerulean air
Phœbus rises brightly.

s **8s. 7s.**

Men of England! who inherit
Rights that cost your fathers' blood!

The succeeding metre is much used in sacred poetry; as the 5th line is usually repeated, the verse is equivalent to 6 lines 8s.7s.

t **8s. 7s. 4s.** *(8s.7s.8s.7s.4s.7s.)*

As the bird beneath her feathers
Guards the objects of her care,
So the Lord his children gathers,
Spreads his wings, and hides them there;
Thus protected,
All their foes they boldly dare.

u **8s. 8s. 7s.**

Bright the morning's light is beaming,
Clear the mountain-tops are gleaming,
Now away retires the night.

v **8s. 8s. 7s. 7s.**

Ev'ry season brings a pleasure,
Ev'ry fortune brings a treasure,
Good that's not without alloy,
Yet a good we may enjoy.

Class 2.

IAMBIC METRES.

a **2.**

Resound
Around.

b **3.**

The morrow
Brought sorrow.

(Two or more lines in succession are amphibrachic.)

c **4.**

How soft and bright
The morning light.

d **5.**

In mirth and sadness,
In grief and gladness.

e **6.**

O trust not earthly joys,
Nor cling to mundane toys.

f **7.**

Where sun and flow'r are beaming,
And light and life are teeming.

g **8. or L.M.**

The golden dews are sparkling now
On heath and hill and flow'r and bough.
(Usually 4 lines to a verse.)

6 lines L.M. may divide either in pairs as in the preceding example, or in threes as in the following—

h **8. 8. 8.**

Let all your work be early done,
By lazy sloth no prize is won,
And time and tide for none will wait.

i **9.**

Awake the song of merry greeting,
The notes inspiring, joy repeating.

j **10.**

When Autumn shadows tint the waving trees,
When fading foliage flies upon the breeze.

k **11.**

The friendships early form'd, the hopes we cherish'd,
At magic touch of Time have dimm'd and perish'd.

INTERMIXED IAMBIC METRES.

l **6. 6. 8. 6. or S.M.**

Ye see the radiant sun
The varied landscape paint,
The moon, with all her starry train,
Illume the arch of night.

m **6. 6. 6. 6. 8. 8. or 148th M.**

Praise God, for he is kind,
His mercy lasts for aye,
Give thanks with heart and mind,
To God of gods alway:
For certainly his mercies dure
Most firm and sure eternally.

n **7. 6.**

In all the years that have been,
The Spring hath green'd the bough.

o **8. 6. or C.M.**

O life is like the summer rill,
Where weary twilight dies.
(Usually 4 lines to a verse.)

p **8. 8. 6.**

In realms that touch the northern pole,
Where streams of burning lava roll
Their desolating course.

LETTER-NOTE EDUCATIONAL WORKS.

A GRADUATED COURSE of Elementary Instruction in Singing.—By David Colville and George Bentley In this course the sol-fa letters are gradually withdrawn. Price in cloth, gilt lettered, 1s. 6d., in wrapper, 1s.

THE PUPIL'S HANDBOOK.—Containing the Songs, Exercises and Diagrams in the above course, published separately. In two parts, price 3d. each.

THE LETTER-NOTE SINGING METHOD, Elementary Division.—A course of elementary instruction in vocal music, by David Colville. In this course the notes are lettered throughout. Price, in cloth, gilt lettered, 1s. 6d., in wrapper, 1s.

THE CHORAL GUIDE.—Containing the Songs, Exercises and Diagrams in the above course, published separately. In two parts, price 3d. each.

THE JUNIOR COURSE.—A course of elementary practice in vocal music, by David Colville. Arranged for treble and alto with *ad lib.* bass, and suitable for schools or junior classes. In penny numbers.

THE CHORAL PRIMER.—A course of elementary training, by David Colville. In this course the notes are lettered throughout. Price sixpence, in wrapper or in penny numbers.

THE SINGING SCHOOL.—A new work, in preparation.

FIRST STEPS IN MUSICAL COMPOSITION.—Now appearing in THE QUAVER.

TWELVE REASONS FOR LEARNING TO SING AT SIGHT.—A leaflet for gratuitous distribution. Teachers can obtain copies, at a nominal charge per dozen or hundred.

THE TRANSPOSITION INDEX.—A card with a moveable index, useful for the purpose of explaining the theory of keys, transposition, modulation, &c. Price 6d.

PUPIL'S CERTIFICATES of Proficiency.—All teachers of the Letter-note Method are urged to use the certificate in their classes as a test and stimulus. Blank certificates, 10d. per dozen, post free.

SINGING AT SIGHT ON THE LETTER-NOTE METHOD.

MR. J. ADLEY, Teacher of Singing on the Letter-note Method, The Park, Tottenham, London, visits St. John's Wood, Ealing, Brentford, Isleworth, Kingston on Thames, Clapham, Blackheath, Lewisham, Norwood, Woodford, Edmonton, etc.

MR. ADLEY has unexceptional references which he will be happy to forward, and holds first class testimonials from London Colleges.

Address:—Mr. J. Adley, The Park, Tottenham, London, N.

CORRESPONDENCE.

VOICE REGISTERS.

To the Editor of the "Quaver."

Sir,—The subject of Voice Registers, to which a correspondent alludes in your last number, is no doubt a most important one; but through lack of knowledge respecting the mechanism of the voice, I experience some difficulty in following his arguments and yours, and it is not unlikely that others of your amateur readers are in a similar predicament. I am an amateur, a real lover of singing, and have at home six little urchins all under the age of twelve, each one of them an amateur like myself. They are very curious to know something about the musical instrument which is theirs by birthright, and many tough questions are asked, which I should like to be able to answer to my own satisfaction as well as theirs.

Will you, therefore, do me the favour of explaining to us a little about the "vocal cords" and their mode of action? In doing which, the avoidance of Latin and Greek terms as far as possible will confer a further and still greater favour.

Yours respectfully,
REGISTER.

The "vocal cords," "vocal ligaments," or "cordæ vocales," as they are variously termed, are situated inside the larynx. The larynx is that portion of the throat popularly called the "Adam's apple," the front part of which projects so much, especially in a man's throat. The case of the larynx is a cartilage, and may be described by comparing it to a square sheet, bent in the middle, the bent part forming the projection in front: it serves as a shield for the protection of the vocal organs, covering them in front, and leaving them open behind, where of course no protection is needed. Immediately behind the projecting front corner, two little pieces of elastic tissue are attached and stretched across the opening of the windpipe towards the back, and these are the "vocal cords," or "vocal ligaments," the vibration of which produces the sounds of the voice. Their front ends being attached at or about the same point, and their hinder ends being a little apart from each other, the vocal cords leave between them a triangular opening for the passage of air in breathing, the apex of the triangle being towards the front.

The mode in which the vocal cords are fastened behind requires special attention. At this point, and resting on the uppermost ring of the wind-pipe, there are two minute obelisks, or pyramids, which are jointed at

their base so as to be capable of being tilted in every direction, and to the top of each of these little obelisks is attached one of the vocal ligaments, consequently anything moving the former will also move the latter. From the top of one obelisk to the top of the other, muscular fibres extend, and the contraction of these muscles has the effect of drawing the tops of the obelisks closer together. Now observe what takes place:—when the voice is not used, the vocal ligaments leave for the purpose of breathing, the triangular opening already referred to; but no sooner does the will issue the word of command, than the ready muscles contract, and draw the little obelisks toward each other, until the vocal cords are so placed that a mere chink is left for the passage of the air from the lungs. Their back ends too, are at the same time pulled towards the back, extending the chink lengthways, and tightening the vocal ligaments. The bellows then does its work, and the air passing through the chink causes the elastic ligaments to vibrate, and thus a vocal sound is obtained.

This chink, or it and the vocal ligaments together, are called *the glottis*. The vocal ligaments themselves are sometimes termed *the lips of the glottis*. In fact they do resemble the lips of the mouth when partially closed, and the action of the glottis in speaking or in singing is very similar to that of the lips when performing on a trumpet or cornet.

Although the vocal ligaments are termed "cords," the relative proportion of their length and breadth does not resemble that of a string: on the contrary, they are thin, flat membranes, semicircular in shape, and, at the widest part, something like half as wide as they are long. A rough idea of their shape and relative position when used in singing or speaking can be obtained by supposing that one of the "little urchins," in his thirst after useful knowledge, and desirous of ascertaining where the sound comes from, has cut a slit right across the centre of the skin which forms the head of his toy-drum: the body of the drum will then represent the windpipe from the larynx downwards; the two semicircular halves of the ruptured drumhead, the vocal cords; and the slit cut across, the chink through which the air passes and causes the vocal cords to vibrate, thus producing a vocal sound.

Although, for the purpose of explanation, we have stated the case thus simply, the mere act of producing a musical sound is really a very complicated process which sets in motion several muscles. Not only so, but the operation is varied in many ways in accordance with the pitch or quality which the singer intends. At one time he may require to have the edges of the vocal cords very close together—almost touching; at another, they may be more apart (the utmost which will produce a sound is said to be a tenth of an inch). In like manner, and for similar reasons, the *length* of the chink varies, a portion being stopped or shut tight. In like manner, too, the vibrating *width* of the vocal cords is increased or diminished; for at one time they may vibrate throughout their whole width, and at another the vibrations may be confined to their edges only. Still further, there is reason to believe that the vocal cords already described are not the only sound-producers: in many cases, probably in most cases, they are, and for this reason they are termed *the true vocal cords* in contradistinction to *the false vocal cords*, which latter are two membranes similar in size and shape to the former, but hung (so to speak) at a higher level, for which reason the two pairs are also sometimes called the *superior* and *inferior* vocal cords. The false vocal cords are, however, supposed to act as sound-producers under certain circumstances, and probably as auxiliary to the others. It will, therefore, be perceived that the voice-apparatus is complex—so complex in fact that unless it formed a part of the singer himself he might well despair of ever attaining proficiency in its use: but this one fact makes all the rest comparatively easy, and, whether the singer is aware of it or not, he has the power, and spontaneously uses it too, of adapting, controlling and regulating the whole apparatus so as to suit the requirements of the particular sound he desires to produce.

The manner in which changes of pitch are produced is now generally understood to be partly by the rising and falling of the larynx (which tends to shorten or lengthen the pipe, and sharpen or flatten the sound); and partly by increasing and diminishing the tension of the vocal cords, which operations also sharpen and flatten the pitch. In singing, the larynx rises and falls as stated, as the singer can easily ascertain for himself: his own sensations, too, will tell him that there is tension; for a medium pitch, a moderate degree of tension; for a high note, extreme tension; and if he is foolish enough to attempt a note too high for his voice, he may overstrain the organs of the voice.

Without the aid of drawings it is difficult to convey a clear idea respecting many points of detail; but possibly the description we have given, rough and incomplete though it is, will supply the desired information. The whole subject is a most interesting one, whether viewed in its musical or its physiological aspect, and will amply reward the student who attempts it even as an amateur. Probably few

singers are aware of a hundredth part of the wonderful contrivances provided specially for their use and benefit: for example, even the sonorous "ahem" with which the vocalist clears his pipe is efficacious only because a whole army of little chimney sweeps have been busily at work while their proprietor was idle, for in the lining of the larynx there is a number of minute cells, and each of these contains certain hair-like fibres or threads which are continually in motion and switch up towards the mouth any mucus or any foreign matter which might impede the efforts of the vocalist. This arrangement of cells the physiologist calls *epithelium*—a name applied to those linings or coverings of internal parts which resemble (in fact, are the same as) the epidermis (or scurf skin) of the outer man: the epithelium of the larynx is a provision of Nature for the convenience of her musical children, and, with other contrivances, many of which have been devised specially in the interest of the singer, show that he was intended to sing well, and if he does not the fault is his own.

Our last month's correspondent also has favoured us with a further communication on the same subject:—

Dear Sir—For the sake of pleasantry we shall assume that we are all "Enquirers" as to the nature and precise meaning of what is termed *voice registers* and their *breaks*, seeing that many who are otherwise competent and learned teachers of music "are themselves waiting further light upon these very matters."

As no discussion is either profitable or pleasant apart from a definite mutual understanding of the *terms* used, I shall define briefly what I mean by *Human Voice. Natural Voice*, and *Falsetto Voice.*

1st, by *human voice*, I mean the *sounds, notes, or tones produced by the complete and united mechanical action* of the air apparatus, the vibrative apparatus, and the resounding apparatus of the human vocal system. These sounds are threefold in their organic and acoustic formation and action, and wonderfully united in their mental and musical effect.

It can be easily demonstrated that the basis of the human voice physiologically consist of three resounding cavities (viz., the throat, nose, and mouth), so balanced and united by the uvula as to form one Grand Voice Concavity, while it is itself acoustically *the balance and unity of the pharyngeal, nasal, and oral resoundings.* All vowels, therefore, are essentially and literally *triune resonances.*

2nd, by *natural voice*, I mean, the sounds generated in the larynx by the vibration of the true (inferior) vocal cords *only*, in their unrestricted and unabridged *length and tension from their narrowest to their greatest breadth*, and *resounded in perfect equilibrium* by the pharyngeal, nasal, and oral cavities.

Any other possible generation and resonance of sound—such as the vibration of a column of air in the windpipe, producing *falsetto*, the "stopping" or "shortening" of the vocal cords by adjacent membrane (such as the cushion of the epiglottis) producing shrill and piercing tones or cries, or, the undue forcing of sound into any of the three voice cavities named, to the partial or entire exclusion of the others, producing thereby, *guttural*, *nasal*, or *oral* (mincing) twangs—any such contingencies are essentially unnatural, abnormal, and unmusical, both in speech and song.

3rd, the term *falsetto* has been differently defined and used by voice theorists and trainers, some meaning by it what others call *head voice* (*voce de testa*), and some even meaning what others choose to call *muddle register* or *medium voice* (*mezzo voce*) which is neither more nor less than medium breath power, on half the breadth of the vibrating membrane. But by *falsetto*, I mean (what the word literally means) *false* voice however it may be produced. So are also screeching, screaming, and roaring—all of which are the result of the restricted action of the vocal cords, and the abnormal and imperfect resoundings of the voice cavities. The best definition I have seen of real falsetto voice, and likely to be proved to be a very true one so far as it goes, is to be found in Sabilla Novello's "Voice and Vocal Art." page 13:—

"*Falsetto* voice is produced by an action of the vocal organs entirely different from that employed to create notes of the natural voice,—in fact, almost independently of the glottis, which, during the production of falsetto tones, opens for about half its length, while the larynx descends in the throat, thus causing the windpipe to shorten and expand. The larynx then rises by degrees as the falsetto notes ascend, but these are created principally by the action of the trachea, and not by that of the vocal ligaments, and the ascending scale of falsetto tones is formed by the gradual lengthening and narrowing of the column of air, or voice contained within the windpipe, and modified by its contractile power. The uncertainty and weakness of falsetto tones may be attributed to the fact of their sound vibrating in the interior of the trachea, and not on the exterior lips of the glottis, as does that of the natural voice."

Falsetto, therefore, being negatively sounds generated *not by the normal action of the true vocal cords*, should exist in no really cultivated voice. It is moreover quite unnecessary. For whatever height in pitch it may add to one's voice in singing, it is thoroughly abnormal and dissonant, and always surprises more than pleases.

My own impression is that the vocal cords should *always vibrate in their whole length* in the natural voice, and throughout its entire compass, whatever may be their breadth or thickness, and should never be "stopped" or "shortened" by any exterior action of the muscles of the larynx, trachea, or glottis, if the natural voice-stroke and spring of each degree of tension are to be sustained throught. *Pitch* of tone would depend, therefore, merely on the ascent and descent of the larynx in the throat to its utmost limit, and the *tension* of the vocal cords from the greatest to the least possible degree, throughout their entire and unrestricted length: but *loudness of tone*, on their *breadth*. In the ascent of the larynx, the vocal cords gradually approximate each other, parallelistically from end to end, until they would almost close up the glottis, and thereby cease their vibration by the limit of their tension. Forcing then would, of course, be physically and vocally dangerous.

Now, Sir, if these definitions of Human Voice, Natural Voice, and Falsetto Voice be accepted as fair, we have the point of discussion now narrowed down to the simple question, "Is there in the *natural voice* such different qualities and actions as to scientifically justify our using such names as *registers* and *breaks* to designate them?"

I think, from the remarks you kindly annexed to my letter, that by *chest voice* you mean exactly what I mean by *natural voice*. If so, the reason why "the larynx *falls* at the instant the change (from chest to falsetto voice) is effected" is that the former is produced by the vocal cords in normal and unrestricted tension, while the latter is not strictly by the true vocal cords at all. Again, if the theory be true that falsetto is the result of the vocal cords vibrating through only a *portion* of their length, the remaining portion being "stopped, giving a higher pitch with the same tension," therein is explained the reason why the "falsetto of a man so closely resembles in quality the 'natural' voice of a woman." It is a physiological fact that the *chordæ vocales* of a man are longer than those of a woman; and, therefore, if he shortens them a feminine voice is the result. For "in the male, the length of the cords when at rest is generally about 73-hundredths of an inch; and when they are stretched to the greatest extent, about 93-hundredths of an inch; in the female the length varies from 51-hundredths to 63-hundredths of an inch. Thus the difference between the male vocal cords when quite relaxed, and when made tense to the greatest degree, is only 20-hundredths or 1-fifth of an inch; while in the female it is still less, being but 12-hundredths or a little less than 1-eighth of an inch." While the 1-fifth or 1-eighth of an inch of vocal cord from its least to its greatest tension is sufficient to produce all the degrees of pitch in the range of the male or female voice throughout two octaves or more, what room, it may be fairly asked, is there in such a short instrument for "registers," "breaks," "optional tones," "chest," "head," "throat," and "falsetto" voices? I think your readers will be able to answer in the negative, and to think that voice theorists have been guided in their vocal nomenclature more by sensation and fancy than by physiology and fact. But if the vocal cords be simply *two thin folds of mucous membrane* vibrating longitudinally (i.e. throughout their whole length), may there not also be a superficial or lateral motion as well, adding amplitude thereto, that is, a vibration throughout its whole surface or breadth, thus causing respectively what is termed "thin edge," register, and "thick" register? This is, I think, physiologically true. But supposing the physical basis of piano voicing is the vibration of the "thin edges" of the vocal cords and the impinging thereon of lesser breath-power; and supposing that the physical basis of forte voicing is the vibration of the vocal cords in their whole width or breadth; it only follows as a natural consequence that the lesser the breath-power the narrower the vibrations of the vocal membrane, and the greater the breath-power, the wider the vibration of the vocal membrane. For every degree, therefore, of breath-power there is a corresponding degree of width, breadth, or thickness, in the vibrative membrane, constituting greater loudness of tone. But there is no more logical or necessary reason for calling any or every degree of the breadth of the vibrative cords by a different name, than for calling any or every degree of their tension or pitch by a different name. Nothing but "confusion worse confounded" can result therefrom. And it is well if we can escape *practically* at least in the meantime from this "slough of despond" and musical bugbear of young vocalists, until science shall have discovered and named aptly the vocal facts we ought all to know.

I hope this subject will be discussed fairly and courteously so that each reader may be the wiser therefrom.

I am,
Yours respectfully,
ENQUIRER.

Our correspondent may rely upon having the matter discussed in a fair and impartial manner. So far as other correspondents are concerned, we have the power to prevent the appearance of anything unfair or uncourteous, and, for ourselves, we are truth-seekers, and will accept what we consider to be truth let it come from what quarter it may.

The theory propounded by our correspondent (paragraph 11 of his letter) would certainly explain the similarity of the man's falsetto to the woman's natural voice, if the artificially shortened vocal cords of the former can so closely imitate the unshortened and entire vibrations of the latter (a supposition which, in the absence of evidence to the contrary, there is no reason to question); and, if the theory that the falsetto is produced by shortened vocal cords were proved, we should accept this explanation as sufficient to account for the similarity alluded to. The theory is not, however, proven; and, as we have already stated, there are other facts to be accounted for before we can consider it as indisputable. Having already occupied so much of our space we must reserve these points for future consideration; meanwhile, as chairman of this "discussion forum," we shall, for the assistance of coming correspondents, briefly enumerate the questions which "Enquirer" has so ably put before us, these are :—

1. How is the falsetto produced?
2. Is the falsetto practically of any use?
3. Are there in the natural voice such things as *breaks* and *registers*?

To which we shall add two more which our readers may find it interesting and profitable to consider—viz.:—

4. What connection has quality of voice with virility?
5. Is it possible to train to sing by inspiration as well as by expiration?

As regards the 5th point, the following facts are known to us. An old lady, now deceased, was in the habit of speaking either way, and could go on for ever without stopping to draw breath; another old lady, still living, when anything astonishes and shocks her, gives vent to her feelings in a long indrawn "Oh"; and the indrawn exclamations of the tragedian are familiar to every playgoer. If any of our readers were to institute a series of experiments bearing upon this point, they might effect some discoveries; they must, however, act carefully in attempting experiments, for alternate expiration and inspiration are precisely the vocal action of that quadruped which (rightly) is considered the most patient, and (wrongly) the most stupid, in his well-known variations on "The Vicar of Bray"; if, therefore, the experimentalist does not take care to secure a judicious privacy, he may chance to hear observations calculated to disturb that serenity and composure of mind which should ever distinguish the scientific investigator.

The Quaver,

January 1st, 1880.

ON the first day of a new decade, and in the first number of a new volume, the season's compliments are peculiarly seasonable. To all our readers, therefore, we wish many years of health, happiness, and prosperity; may every worthy crotchet of theirs attain fruition; and may their quavers never diminish until the quivering tones of age remind them that the finale is near!

During four years we have done our best to keep our friends informed respecting the musical world—its thoughts, actions, and aspirations, and more particularly that section of it devoted to the work of popular education; we have also endeavoured to give our readers some information and instruction upon certain topics not usually treated in a penny journal: what success has attended these our efforts on their behalf, readers must judge.

Last month's number contained seasonable music, printed full size for a certain class of Letter-note singers. The four pages form the first number of a short series, which will be printed apart from THE QUAVER, on better paper, at the price of threepence per number. The "hospitality" enjoined in the Christmas song we endeavoured to exemplify towards our friends by presenting them with the extra music without extra charge: if readers wish to return our hospitality, they can evince it most effectually by giving THE QUAVER a place at their firesides and those of their friends.

MONTHLY NOTES.

THE advantages derivable from the use of the telephone are fully recognised in Chicago. A young lady telephoned to her mother-in-law, at a late hour, to the effect that "baby was coughing diphtheritically, and that she did not know what to do." The elder lady at once telephoned on to her family doctor, through the Central Office, asking his advice, and received answer forthwith, requesting her to place him in direct communication with the mother of the child by connecting the wires between his consulting room and her daughter's house. This done, he telephoned to the anxious mamma, "When the next fit of coughing commences, let the child cough into the instrument." His instructions having been punctually complied with, he transmitted the following reassuring message by electric word of mouth: "There is no need that I should come on to you at once, your child is only attached by ordinary catarrh, which has nothing in common with diphtheria." The whole transaction was completed under the half-hour, and all parties concerned in it, except the baby, were enabled to pass a quiet night in bed, through the timely ministrations of the wonder-working fluid.—*Daily Telegraph.*

The proposal embodied in a letter from Prince Christian, dated the 28th of May last, that the Royal Academy of Music should surrender its present charter and accept a new one, has, after full and deliberate consideration, been respectfully declined. It will be remembered that in 1868, when the institution was in financial difficulties, the directors thought it advisable to surrender the Royal Charter to the Queen, but that her Majesty declared her inability to receive it back or to annul it. At great personal sacrifice, then, the professors undertook to carry on the Royal Academy of Music at their own risk and on their own responsibility; and it is claimed in their honour that the present highly satisfactory position of affairs, both artistic and pecuniary, is due in the main to their zeal and self-denial. Having consulted with the professors, therefore, and obtained their views as to the scheme of the new Musical Corporation, the committee of management say they would gladly see the institution placed on a more permanent basis than that upon which it at present rests, and they venture to think that this object would be better obtained by giving to the Royal Academy of Music, without reservation, the patronage and support which are promised to the proposed college, than by erecting a new institution. The reply to his Royal Highness, agreed upon at an extraordinary general meeting of the directors on the 13th instant, was consequently to the effect already indicated.—*Daily Telegraph.*

Mr. C. A. Drake, the chairman of the Comedy Opera Company (Limited), is now in Holland making arrangements for the production of *H.M.S. Pinafore*, and the new opera-comique *Marigold* at some of the principal theatres in Amsterdam, Rotterdam, Antwerp, and other places.

"Well adapted for the purpose."—*Mr. Hullah's official report of the International Exhibition of* 1871.
"Nothing will be more useful to the young *Sol-faist* than commencing the execution of it (just intonation) on an Intonator."—*General T. Perronet Thompson in "Just Intonation."*

INTONATORS,

For training to habits of just intonation, and as an aid to the self-teacher.

THE Intonator is an improved variety of the old "monochord," and provides what may be termed a *working model* of the musical scale or gamut. It presents to the eye a chart or diagram of the scale, with the additional advantage that it possesses the power of *producing* the sounds which a diagram can only indicate.

As the sounds are obtained by dividing a string upon mathematical principles, they are strictly correct, and the Intonator may be used as a model for the voice. For this purpose it is greatly superior to the pianoforte, which only gives the sounds approximately. The Intonator also provides examples of sounds which are not to be found on the pianoforte, such as the difference between the sharp and the flat, also the acute and grave forms of several sounds; and as no skill is required to use it, the instrument is specially valuable for purposes of self-teaching.

The Intonator consists of a catgut string, stretched on a sound board or box. The string is raised at one end by resting on a *bridge*, and is attached to a peg, by means of which it may be raised or lowered in pitch. The sound is produced by twanging the string, after the manner of a guitar or harp, or by means of a bow, like a violin; the point on the string to be thus operated upon being about an inch from the bridge. The various sounds of the scale are produced by *stopping* the string at certain points, so as to permit a longer or shorter portion to vibrate. For this purpose *frets* are placed underneath the string, and the operation consists in pressing down the string until it comes into firm contact with the required fret, when the sound is to be drawn out in either of the ways explained above.

The frets are labelled with the sol-fa syllables or their initials, or with the numerals 1 to 7: thus DO, or 1, corresponds to the key-note,—RE, or 2, to the second degree of the scale,—MI, or 3, to the third degree, etc., and this rule applies quite irrespective of the pitch at which the string may be for the time being, for the string performs alike in all keys, and the sounds always remain *relatively* the same. All keys are, therefore, "natural" upon the Intonator, and the operations of pitching the key, or transposing to another key, consist simply in tightening or slackening the string (by means of the peg) to the required pitch. The pitch of the string can be altered as much as an octave, giving the power of playing in all keys; and on these improved Intonators, by a simple contrivance, provision is made for playing in two or more natural keys *without altering the pitch of the string*. The chromatic sharps or flats, or both, are given on all the Intonators.

LIST OF PRICES.

Fuller information, including diagrams representing the fretboards of Nos. 1 *and* 2, *is given in a tract entitled "The Intonator and how to use it," price twopence, post free.*

The Intonators without sound box are mounted on solid wood: the tone is weak, but sufficient for self-training.

No. 1 INTONATOR, Price 7s. 6d. Without Sound Box, 3s. 6d.

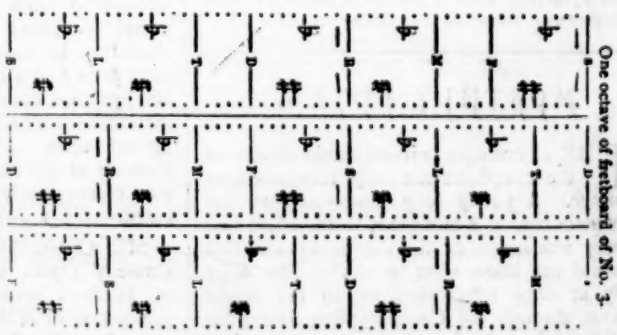
No. 1 provides for two natural keys without altering the string—viz., the major and minor keys of the same tonic: for example, if the string is pitched at C, the player has the keys of C major and C minor before him in their natural form.

No. 2 INTONATOR, Price 7s. 6d. Without Sound Box, 3s. 6d.

No. 2, in like manner, provides for two natural keys without re-tuning, giving the key at which the string is set and that a fifth higher: for instance, if the string is tuned to C the keys of C and G are present in their natural form.

No. 3 INTONATOR, Price 10s.

No. 3 provides for three natural keys without altering the string—viz., the key at which the string is pitched, with those a fourth and a fifth higher, as, for example, the keys of C, F, and G: a sliding fretboard permits either of the columns to be brought under the string. All the chromatic sharps and flats are given in each column; the short frets to the extreme right, in each column, being the sharps; and those to the extreme left, the flats.



Sold in connection with the Letter-note Singing Method by

F. PITMAN, 20, Paternoster Row, London, E.C.

BRITISH MUSEUM 22 MY 88

While all is hush'd.

BOAT SONG. KREUTZER.

Andante. Met. 90 = ♩

While all is hush'd on ev' - ry side, While
On ev' - ry side,
all is hush'd on ev' - ry side, We wake, we
on ev' - ry side,
wake, we wake the swel - ling note, We wake, we wake, we
wake the swel - ling note, the swel - ling note, the swel - ling
wake, the swel - ling note, the swel - ling note, ...
Key F.
note. The sil - v'ry moon, The sil - v'ry moon shines
The sil - v'ry moon the sil - v'ry

The sil - v'ry
far, shines far and wide; The sil - v'ry moon shines
The sil - v'ry moon, the sil - v'ry
moon shines far, shines far and wide,
far and wide, shines far and wide, far and wide, far
sil - v'ry moon shines far and wide,
moon shiyes far and wide, far and wide, and wide,
Key B flat.
- - - - and wide, And
And smooth-ly, smooth-ly glides our boat,
smooth - ly, smooth-ly glides our boat, The sil - v'ry moon shines clear and
- - - And smooth - ly glides our boat,
bright, And smoothly glides our boat, The sil - v'ry moon shines clear and

And smooth-ly glides our boat, glides - - our - - boat, And
bright, And smooth-ly glides our boat, And smooth-ly glides our boat,
smooth - ly glides, - - - - - And smooth - ly glides, - - -
And smooth-ly glides our boat, And smooth-ly glides our
And smooth - ly glides our boat. - - - - - - -
boat, And smooth-ly glides our boat, glides - - our boat.
boat.

Hark! the Goddess Diana.

Arranged from R. SPOFFORTH.

Moderato. Met. 90 = ♩
1. Hark! the God - dess Di - a - na calls out for the chase, Bright
2. The hounds are un - ken - nell'd and ripe for the game, We
Phœ - bus a wa - kens the morn, Hark! the God - dess Di-
start to o'er - take the swift hare, The hounds are un
- a - na calls out for the chase, Bright Phœ-bus a - wak - ens the
- ken - nell'd and ripe for the game, We start to o'er - take the swift

morn. Rouse, rouse from your slum-bers to hun - ting give place, The
hare. All dan - ger we scorn, for plea - sure's our aim. To the
hunts-man is wind-ing, is wind - ing his horn, The hunts-man is
fields then a - way, then a - way let's re - pair, To the fields then a-
- wind-ing, is wind-ing his horn, The hunts-man is wind-ing, the hunts-man is
- way, then a - way let's re - pair, To the fields then a - way, To the fields then a -
p cres f
wind-ing, The hunts-man is wind-ing, is wind-ing his horn. The hunts-man is
- way, To the fields then a - way, then a - way let's re - pair. To the fields then a -
cres
p p f
wind-ing, is wind-ing his horn, The hu tsman is wind-ing, is wind-ing his horn.
- way, then a - way let's re - pair. To the fields then a - way, then a - way let's re - pair.